From Stiffness to Swiftness: A Case that looks into OMM as Adjunctive Therapy for Polymyalgia Rheumatica

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Introduction

Polymyalgia Rheumatica affects adults over the age of 50 with peak incidence at ages 70-80. While specific cause is unknown, association with allele HLA-DR4 and increased proinflammatory cytokines are observed. Symptoms usually present as pain and stiffness in proximal muscles caused from glenohumeral synovitis, bicep synovitis, and subacromial bursitis. With such conditions, somatic dysfunction should be considered an expected sequela. Patient in this case did present with cervical somatic dysfunction which benefitted from Osteopathic manipulation.

Case Presentation

54-year-old male with diabetes and hypothyroidism presented with multiple joint and muscle pains. Patient had upper & lower extremity pain for one month prior. Patient had an outpatient MRI that showed evidence of osteoarthritis and the patient was treated with cortisone injection with minimal improvement. Symptoms continued to worsen and he presented to the emergency department. Patient’s spouse was distraught when she was told ‘there is nothing found and he will be discharged home’. She pleaded that he be admitted. Patient was given Decadron and gabapentin and admitted. Patient was noted to have elevated ESR and CRP. Work-up also included multiple rheumatologic serologies which were negative. Given the clinical presentation, lab data and history of diabetes, the presumptive diagnosis of polymyalgia rheumatica was made. Patient was continued on prednisone. On osteopathic exam the cervical musculature was hypertrophic and restricted in rotation. Patient received multiple OMM treatment of cervical muscle energy – direct technique. Patient continued to state remarkable improvement in mobility and decreased pain. Patient’s wife stated tremendous relief that after all of the previous workup that the patient was finally getting thorough care and treatment from multiple modalities.

Figure I. Overview of motor and sensory systems highlighting proposed pathway that would account for patient’s presentation of cervical somatic dysfunction from PMR. Pain travels from the afferent nerve fibers to efferent pathway to muscle fibers creating increased tension and eventual hypertrophy.

Figure II. Muscle Energy direct technique used on patient multiple days while in the hospital.

Figure III. Soft Tissue technique used for patient’s cervical muscular strain.

Discussion

Treatment for Polymyalgia Rheumatica is continually evolving with increasing use of biologics and immunomodulators and continuing research being carried out for new agents. However, research regarding any role for OMM as adjunctive treatment for PMR is scarce. This patient demonstrated simultaneous presentation of PMR with somatic dysfunction. These presentations are likely linked due to the ongoing pain and stiffness caused by patient’s rheumatologic disease causing increased firing from afferent nerve fiber causing reflex activation of motor cortex causing increased muscle tension and eventual hypertrophy. This hypertrophy thus causes the somatic dysfunction. If association between rheumatic disease and somatic dysfunction can be further proved, then adjunct OMM should be the mainstay treatment for these patients.

References